

10 Appendix A - General Product Information

Radiofrequency radiation exposure evaluation

This exposure evaluation is intended for **FCC ID: 2AJ90-HG7822**

According to KDB 447498 D01v06 section 4.3.1, For frequencies between 100 MHz to 6GHz and test separation distances ≤ 50 mm, the Numeric threshold is determined as:

Step a)

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR

- >> The fundamental frequency of the EUT is 2402-2480MHz, the test separation distance is ≤ 50 mm.
(Manufacturer specified the separation distance is: 5mm)
(5mm is the worst case according to the KDB)

Step b)

- >> Numeric threshold (2402MHz), $\text{mW} / 5\text{mm} \cdot \sqrt{2.402\text{GHz}} \leq 3.0$
Numeric threshold (2402MHz) $\leq 9.678\text{mW}$

- >> Numeric threshold (2441MHz), $\text{mW} / 5\text{mm} \cdot \sqrt{2.440\text{GHz}} \leq 3.0$
Numeric threshold (2441MHz) $\leq 9.602\text{mW}$

- >> Numeric threshold (2480MHz), $\text{mW} / 5\text{mm} \cdot \sqrt{2.480\text{GHz}} \leq 3.0$
Numeric threshold (2480MHz) $\leq 9.525\text{mW}$

- >> The power (measured + tune up tolerance) of EUT at 2402MHz is: 3.17dBm = 2.075mW
The power (measured + tune up tolerance) of EUT at 2441MHz is: 3.13dBm = 2.056mW
The power (measured + tune up tolerance) of EUT at 2480MHz is: 3.39dBm = 2.183mW

Which is smaller than the Numeric threshold.

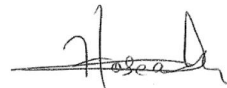
Therefore, the device is exempt from stand-alone SAR test requirements.

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